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TENSOMETER FOR SIMULTANEOUSLY EVALUATION POLYMERIZATION STRESS, SHRINKAGE AND MODLUS DEVELOPMENT

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Description

The present invention generally relates to measurement of stress during curing of a polymer material and, more particularly, is concerned with evaluating the development of polymerization shrinkage and modulus during curing of a polymer material.

Abstract

The present invention relates to apparatus and method for evaluating the development of PS during polymerization of dental restorative composites, which includes using a tensometer for measuring deflection of a calibrated cantilever beam induced by PS and calculating PS from the measured deflection. A tensometer according to an embodiment of the present invention can be used to quantify PS at varying beam locations and heights, and determine trend in PS development as a function of beam length. More importantly, in the present invention, the development of polymerization shrinkage and the elastic modulus can be simultaneously obtained in real time.

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References

- 11-015Application
- Docket: 11-015

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

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